

## ABSTRACT OF THE DISCLOSURE

A remote telemetry system utilizing dual communication pathways comprising low-cost remote communications devices operating on existing wire-based communications systems, wireless communications systems, and / or a combination thereof, to provide real-time reading and control of the remote telemetry units. A central controller directs the operation of the remote telemetry units and receives data from the remote telemetry units. The central controller is configured to utilize a conventional broadcast communications channel to transmit commands to individual remote telemetry units, each of which is assigned a unique identification code. Signals broadcast from the central controller are received at receivers associated with each remote telemetry unit, which performs a directed operation if a unique identification code included in the broadcast signal matches the identification code assigned to the remote telemetry unit. Each remote telemetry unit is provided with access to a conventional shared two-way communication pathway for return communication to the central controller. The shared two-way communication pathway is inactive unless specifically activated by a remote telemetry unit upon receipt of a signal from the central controller. In this manner, a large number of remote telemetry units may be provided with regulated access to a single shared two-way communications channel.